



UMass Soil & Plant Nutrient Testing Laboratory

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USE THIS FORM FOR PLANT NUTRIENT SAMPLE SUBMISSION FOR FIELD CROPS. (See page 2 for sampling instructions, fees, and description of services.)

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|----------------------|----------------------|--|
| Main Contact: | Send Copy to: | Method of receiving results US Mail (Please include \$2 per order for postage & handling) Email Send copies to: |
| Name: | Name: | |
| Business Name: | Business Name: | |
| Street Address: | Street Address: | |
| City, State, Zip: | City, State, Zip: | |
| Phone: | Phone: | |
| Email Address: | Email Address: | |

| LAB# (Leave blank) | Sample ID (You create this) | Test Requested _____. |
|-----------------------|--------------------------------|---|
| | | Standard (\$45) or Standard w/o Nitrogen (\$30) |
| | | |

Order Total \$ _____

| | |
|--|---|
| <p>Sample Information</p> <p>Crop, management, and soil information</p> <p>Date Sampled: _____</p> <p>Crop: _____ Variety: _____</p> <p>Growth Stage: _____</p> <p>Plant spacing or population: _____</p> <p>Lime: _____ tons/Acre applied on: _____ (date)</p> <p>Manure: _____ tons/A _____ gals/A applied on: _____ (date)</p> <p>Was manure incorporated? Yes No</p> <p>Fertilizer rate(s) and date(s): _____</p> <p>_____</p> <p>_____</p> <p>Soil series (if known): _____</p> | <p>Complete this section for problem diagnosis</p> <p>If leaves are discolored, does color variation occur: Along leaf margins Interveinal In spots Over entire leaf</p> <p>Leaves first affected at shoot: tip base over entire shoot</p> <p>Symptoms first seen: _____ (month & growth stage)</p> <p>Describe additional symptoms: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> |
|--|---|

| Office Use Only | |
|-----------------|------|
| Received | Due |
| Check# | PO# |
| Cash | Date |

General Sampling Procedure:

For a routine evaluation of plant status, we compare nutrient levels to data collected in scientific literature. It is extremely important to collect samples at the growth stage and from the plant part for which plant nutrient data is available.

Specific sampling instructions for most commercially grown field crops in New England are provided here. For those not listed, it is generally best to sample the most recently developed leaves from the upper portion of the plant.

Samples should reflect areas with uniform management and soil type. Where differences occur within a field, sampling should be refined to represent these changes. Samples should represent only one cultivar, but should be collected from several different plants within the field.

When you suspect a nutrient deficiency, always attempt to collect one sample from plants in the affected area and a second sample from plants of the same variety in an area showing normal growth. This will allow for direct comparison of nutrient levels and may aid in diagnosing specific nutrient deficiencies.

When collecting tissue samples, avoid diseased or dead plant material, tissue damaged by equipment or insects, and plant tissue stressed by excessive heat, cold, or moisture.

After collecting your composite sample, rinse the tissue with clean water to remove pesticides, foliar applied nutrients, and soil particles. Place wet samples on a clean paper towel to dry. Once dry, carefully place sample in a **small paper bag labeled with your sample ID** and complete the submission form. Hand deliver or mail the sample, submission form, and a check or money order payable to UMass to the address listed on the front of this form.

Plant Nutrient Test Descriptions & Fees

Standard Nutrient Test: \$45.00

A determination of the Total Tissue P, K, Ca, Mg, Zn, Cu, Mn, Fe, and B. Analysis by ICP Spectroscopy of acid wet digestion in Nitric Acid, Hydrochloric Acid, and Hydrogen Peroxide in a block digester. Also included Total Nitrogen by catalytic combustion.

Standard Nutrient Test without Total Nitrogen: \$30.00

Same as Standard Nutrient Test but without Total Nitrogen

Crop specific sampling instructions:

| Growth stage | Plant part collected | Number of plants sampled |
|--------------|----------------------|--------------------------|
|--------------|----------------------|--------------------------|

Field Corn

| | | |
|---------------------------------|------------------------|----------|
| Early vegetative, less than 12" | Entire shoot w/o roots | 15 to 20 |
|---------------------------------|------------------------|----------|

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|--------------------------------------|-------------------------------|----------|
| Late vegetative, prior to tasselling | Youngest fully developed leaf | 15 to 20 |
|--------------------------------------|-------------------------------|----------|

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|----------------------------------|-----------------|----------|
| From tasselling to early silking | Entire ear leaf | 15 to 20 |
|----------------------------------|-----------------|----------|

Soybean

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|---------------------------------|------------------------|----------|
| Early vegetative, less than 12" | Entire shoot w/o roots | 15 to 20 |
|---------------------------------|------------------------|----------|

| | | |
|--------------------------|----------------------------------|----------|
| During initial flowering | Youngest fully developed leaflet | 20 to 25 |
|--------------------------|----------------------------------|----------|

Small grain

| | | |
|-----------------------------------|------------------------|----------|
| Jointing, Zadocks growth stage 30 | Entire shoot w/o roots | 30 to 40 |
|-----------------------------------|------------------------|----------|

Alfalfa, clover, and other forage legumes

| | | |
|---------------------|--|----------|
| Just prior to bloom | Entire leaflet collected about 1/3 of the way down the plant | 30 to 40 |
|---------------------|--|----------|

Hay, pasture, and forage grasses

Prior to head emergence, or at optimum growth stage for harvest